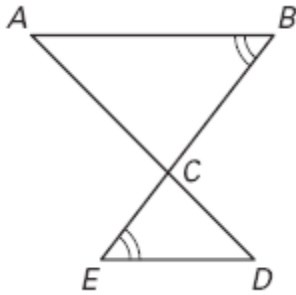


Pre-AP Geometry 8.5 Assignment: Proving Triangles are Similar Page 1
(pp 488-491)

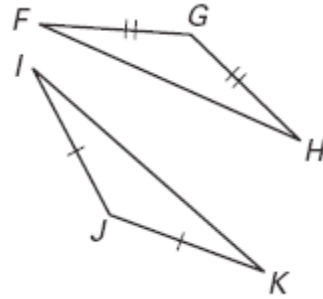
1. What is your name?

Are the triangles similar? If so, state the similarity and the postulate or theorem that justifies your answer.

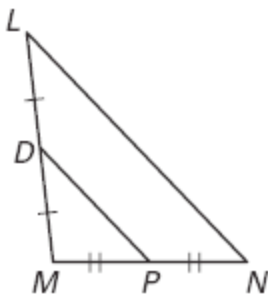
2.



3.



4.



Sketch the triangles. Then, name a postulate or theorem that can be used to prove that the triangles are similar.

5. In $\triangle ABC$, $m\angle A = 38^\circ$ & $m\angle B = 94^\circ$. In $\triangle XYZ$, $m\angle Y = 94^\circ$ & $m\angle Z = 48^\circ$.

6. The ratio of AB to XY is $2:3$. In $\triangle ABC$, $m\angle B = 75^\circ$, & in $\triangle XYZ$, $m\angle Y = 75^\circ$. The ratio of BC to YZ is $2:3$.

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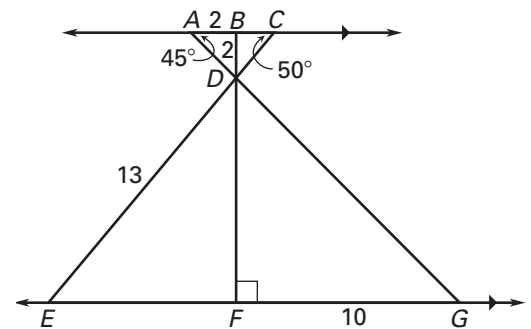
7. Sketch the triangles. Then, name a postulate or theorem that can be used to prove that the triangles are similar. In $\triangle ABC$, $m\angle B = 50^\circ$, $AB = 4$ & $BC = 9$, In $\triangle XYZ$, $m\angle Y = 50^\circ$, $XY = 2$ & $YZ = 4.5$.

Use the diagram to find the following.

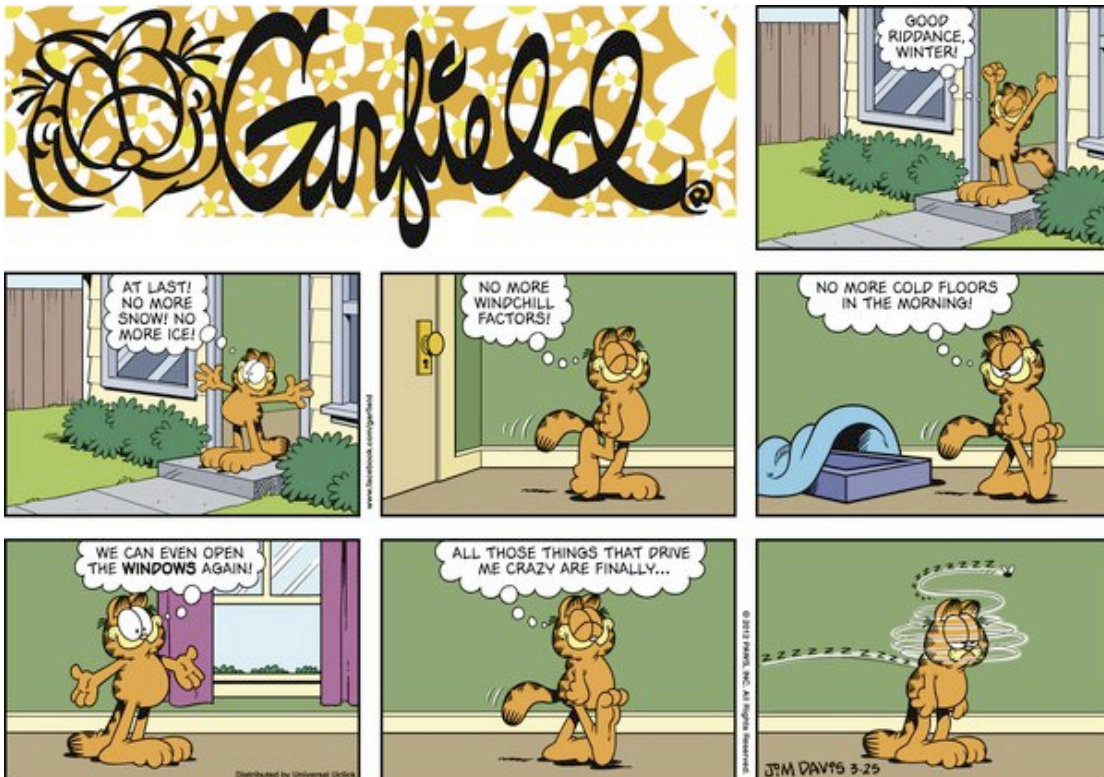
8. $m\angle DGE$

9. FD

10. EG



11. Name the three pairs of triangles that are similar in the figure.

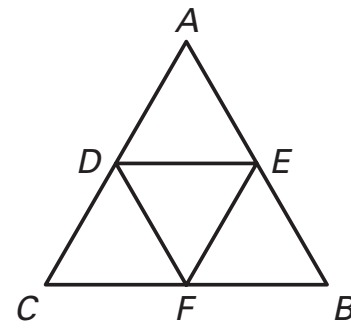


Pre-AP Geometry 8.5 Assignment: Proving Triangles are Similar Page 3
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Given: $\triangle ABC$ is equilateral.

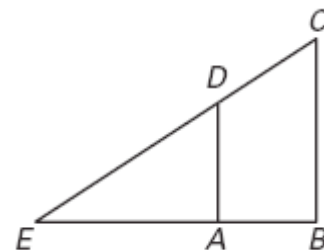
12. \overline{DE} , \overline{DF} , & \overline{EF} are midsegments.

Prove: $\triangle ABC \sim \triangle FED$



13. Given: $ABCD$ is a trapezoid with \overline{AD} & \overline{BC} as bases.

Prove: $\triangle EAD \sim \triangle EBC$

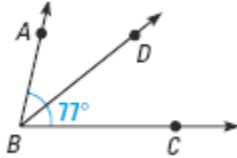


Pre-AP Geometry 8.5 Assignment: Proving Triangles are Similar Page 4 (pp 488-491)

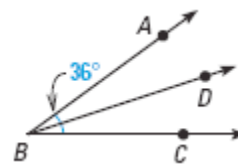
Review.

\overline{BD} is the angle bisector of $\angle ABC$. Find any angle measure not given in the diagram. (Chapter 1 Section 5)

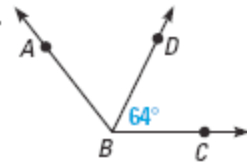
14.



15.



16.



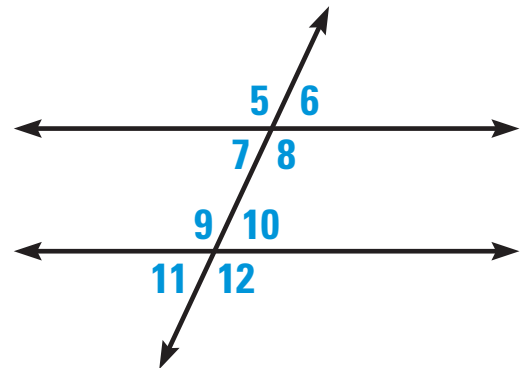
Use the diagram shown to complete the statement. (Chapter 3 Section 1)

17. Name an alternate exterior to $\angle 5$.

18. Name a same-side interior angle to $\angle 8$.

19. Name an alternate interior angle to $\angle 10$.

20. Name an angle that corresponds to $\angle 9$.



Find the coordinates of the image after the reflection without using a coordinate plane. (Chapter 7 Section 2)

21. $T(0, 5)$ reflected in the x-axis.

22. $B(-3, -10)$ reflected in the y-axis.

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Find the coordinates of the image after the reflection without using a coordinate plane. (Chapter 7 Section 2)

23. $P(-2, 7)$ reflected in the y -axis.

24. $C(-5, -1)$ reflected in the x -axis.



"His ego is so big he refuses to follow anyone but himself on Twitter."